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A Cost System For a Woollen Mill

By L. GALIPEAU
Montreal, Que.

(This description of a cost system was submitted as part of the requirements of the Society's second Examination. The forms are condensed for purposes of reproduction here.)

Summary of Manufacturing Processes

The raw material used is called "TOP" and it is bought in different qualities numbered 48, 50, 52, etc. Top is wool which has been washed, carded, and it is in the form of a loose rope of about two inches in diameter. Tops are bought from England.

Drawing Department—In the drawing department, tops of different qualities are mixed, to produce the quality desired, and are passed in the Lap machine, made of rollers which combine the tops to form a lap ready to be combed. The combers place all fibres parallel and clean the tops. The tops are then passed through drawing frames which reduce the diameter of the tops. From the drawing frame, the tops pass through slubbing machines which again reduce the diameter of the tops and put them on bobbins.

Roving Department—In the roving department, the top which is now called roving passes through the roving frame and its diameter is still reduced and it is again put on bobbins.

Spinning Department—In the spinning department, the spinning frame draws out the roving and gives it its final twist and change the roving into what is called Yarn. The yarn at this stage is still one thread.

Twisting and Reeling—When yarn is wanted of more than one thread, from the spinning department it is sent to the twisting department. The twister puts two or more threads together and twists them and the yarn is again put on bobbins. The yarn is then called 2 ply, 3 ply etc., according to the number of threads. When yarn of more than one thread is sold in natural color (white) it goes from the twisting department to the coning department, but when it has to be dyed, from the twister it goes to the reeling machine which takes the yarn from the bobbins and puts it in hanks and hanks are attached in bundles and sent to the dyeing department to be dyed.

Dyeing Department—To manufacture yarns of one thread only, the top itself is dyed before going into any process and returns to the drawing, roving, spinning, coning. Yarns of more than one thread however are dyed only after they have been through drawing, roving, spinning, twisting and reeling. In the dyeing department yarns are dyed and dried.

Coning Department—The yarn is received in hanks from the dyeing department in cases of two-ply, three-ply yarns, and yarn is received in bobbins from the spinning department in case of single yarns. In the coning department the yarn is put on paper cones and cones of yarn are sent to the finished goods warehouse to be kept in stock until sold.

A COST SYSTEM FOR A WOOLLEN MILL

Departments

Productive—Drawing, Roving, Spinning, Twisting and Reeling, Dyeing, Coning.

Non-Productive—Receiving and Storing, Repair, Cost Accounting.

Sales and Administration—Finished Goods Store, Shipping, Sales, Administration and General.

Raw Materials and Supplies, Purchasing, Receiving, Storing, Issuing—

The requisitions for material and supplies are issued by the superintendent of department to the storekeeper. (Form 1). There is a minimum and maximum quantity fixed for each class of material and supplies. When the minimum quantity is reached, the storekeeper issues a requisition on the purchasing department for material needed (Form 2). The purchasing department upon receipt of a requisition from the storekeeper gets information and quotations and issues a purchase order (Form 3).

When the goods are received in the receiving department, the receiver checks the goods as to quality and quantity with his copy of the order and makes a receiving slip (Form 4). The receiver has two files; one for unfilled orders and another for filled orders. If the goods received complete the order, the order with receiving slip attached is transferred to Filled Orders file; but if the goods fill only a part of the order, the receiving slip is attached to the order which remains in the unfilled orders file. The goods received are delivered to the storekeeper with a copy of the receiving slip, that is, the storekeeper fills the requisitions received from the superintendent of the department and delivers the material to the department with a delivery slip (Form 5).

The accounting procedure for the control of raw material and supplies is as follows:

The storekeeper keeps store cards (Form 6) on which are posted quantities of each forms nos. 3-4-5-9-8 and prices from copies of invoices from creditors. The quantity for goods received is posted on the cards from the receiving slips and the prices from the invoices, so that at the end of the month any quantity on cards without price means that the invoices have not been entered in the books or they have been charged to the wrong account or any invoice that comes to be posted on cards for which there is no corresponding quantity means that goods have not been received in the stores.

The store cards are controlled by a controlling account called "Raw Material and Supplies Store Control". The total of invoices charged to the stores is debited to the store controlling account and the total of issues from stores is credited to the stores controlling account.

The invoices from creditors are received in duplicate in the purchasing department. Both copies are stamped (form 7) and are checked against order and receiving slip, and the original is forwarded to the general accounting department and the duplicate to the cost accounting department and all duplicates of invoices affecting stores are passed by the cost accounting department to the storekeeper.

The freight and duty on material bought is charged to the material affected and entered in the same month as the invoices are entered in the books.

The store cards show at the end of each month the balance on hand in quantity, amount, and the average price is therefrom cal-

ORGANIZATION CHART Board of Directors

President

Vice President

General Manager

Secretary Treasurer

Chief Accountant
Credit Manager
Cost Accountant

Plant Manager

Supt. Drawing

Supt. Roving
Supt. Spinning

Supt. Twisting
Reeling

Supt. Dyeing

Purchasing Agent

Receiver Storekeeper

Repair Boss

Sales Manager

Sales Office Manager
Salesman
Shipper

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A COST SYSTEM FOR A WOOLLEN MILL

culated and the issues of raw material are priced by the storekeeper at the average price at the end of the preceding month.

There is standard set however for material and any material issued from store is charged to productive department at standard price and credited to store account at actual price; any difference is debited or credited to a "Price of Raw Material Variation" account.

Debit Notes (Form 8) are issued in cases where storekeeper return goods to a supplier. The accounting procedure is the same as in cases of invoices but the entries on the records are the reverse.

When a productive department returns material to stores slip (Form 9) is issued and the procedure is the same as in cases of delivery slip (Form 5) but the entries on the books are the reverse.

Invoices from creditors are entered on (forms 16 and 17) purchase journals.

Direct Labour System and Control

Wages for productive departments are paid on piece work bonus system. The worker gets a fixed rate per pound produced up to a certain quantity and gets a bonus on each pound produced above that quantity. Example: A worker gets .01 per lb. on each pound produced up to 200 lbs., and .01½ on each pound produced above 200 lbs. If worker produces 150 lbs he gets 1.50, if he produces 200 lbs he gets 2.00, if he produces 250 lbs he gets 2.63.

Each worker keeps his time on time cards (Form 10) used in connection with time clocks.

The superintendent of each department controls the production of his department and a clerk under the supervision makes the production reports for each worker (Form 11). These reports give the wages for each worker and are used to make production reports for each department (form 12) from which entries are made at the end of the month.

The accounting procedure for accounting and controlling direct labor is as follows:

From all forms 11, the payroll is made (form 12), and each total of the payroll is posted to debit of direct labor account for each department at standard cost and credit is posted to accrued payroll at actual cost; any difference between standard labor cost and actual labor cost is debited or credited to a "Labor Cost Variation" account.

In the factory ledger, the check received for wages is debited to accrued payroll and credited to general ledger.

Indirect Labor and Salaries

Indirect Labor for productive departments, and salaries for receiving, shipping, and repairs departments are paid on hourly rate and charged to proper accounts; time cards form 13 are used.

Salaries for offices are paid on semi-monthly basis.

From forms 13 used for indirect wages and salaries, payroll is prepared (form 14).

Direct wages, Indirect wages, and salaries are paid on the 3rd and 18th of each month for periods 1 to 15 and 16 to 31; so that the pay for period 16 to 31 is accrued at the end of the month.

The balance in accrued payroll account in the factory ledger at the end of the month is debited and credit going to general ledger. At the beginning of the next month entry is made to reverse: debiting general ledger and crediting accrued payroll. In general ledger entry is made at the end of the month debiting factory ledger and crediting accrued payroll. At the beginning of next month entry is made debiting accrued payroll and crediting factory ledger.

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Payment of Wages and Salaries

Wages and salaries are paid in money.

From forms 12 and 14, a clerk makes the pay envelopes on which appear the number of the worker, his name, date of pay, and also a line on which the employee signs his name as a receipt.

In the envelopes prepared as above, another clerk gets the cash, and puts it in the envelopes.

Both clerks then distribute the payroll and one gives the envelope to the employees and the other gets it back signed.

Factory Overhead

There are overhead accounts for each department (productive and non productive where items which can be directly charged to a department are recorded; and besides those accounts, there is a department called "General Overhead" composed of many overhead accounts where items which cannot be distributed directly to a department but which concern the whole factory, are recorded and distributed at the end of each month to all departments affected. (Form 18).

After the factory overhead "General Department" has been distributed to all departments, the cost of non productive department is distributed to productive departments on form 19.

The general factory overhead, and the cost of non productive departments being distributed, the cost of factory overhead is gathered on form 20 where standard overhead is also shown at a certain rate per labor hours and the amount of standard overhead is debited to Standard Overhead account with corresponding credit to various actual overhead accounts, and any difference to an account called Overhead Variation.

Basis for Distribution of General Factory Overhead:—

Depreciation—Distributed according to value of machinery equipment, furniture and Fixtures.

Light —Distributed according to "Watts" used in each department.

Power —Distributed according to H.P. in each Department.

Rent —Distributed according to floor space occupied.

Taxes —Distribution on floor space.

Insurance —Distributed on value of machinery & equipment, furniture & fixtures and stock in each department.

Basis for Distribution of Non Productive Departments Overhead:—

Receiving & Raw Material Stores—Distributed according to value of raw material and supplies taken from store (F. 19).

Repair Department— Distributed according to number of hours of work for each department.

Cost Accounting Office Expenses— Distributed according to direct labor hours (Form 19).

Goods in Process Control

It will be seen by referring to list of accounts, that in each department, there are the following accounts: Standard Material, Standard Labor, Standard Overhead.

So any production of any department recorded on form 11 represents production transferred to next department. At the end of the month, all forms 11 for each department are gathered on form 21 from which entries are recorded in the books debiting Standard Material, Standard Labor and Standard overhead of department receiving goods, and crediting: Standard Material, Standard Labor and Standard overhead of department delivering the goods in process.

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As there are standard rates for material, labor and overhead in each department, standard rates are therefore available for goods in process when leaving each department and transfer entries are made on those rates.

Any balance in Standard Material, standard labor and standard overhead accounts at the end of the month represents value of work in process in each department.

At the end of the year, a physical inventory of Raw Material, supplies, goods in process is taken and any difference with book inventory is recorded in Inventory Adjustment account.

Finished Goods Store Control

Goods from the coming department are delivered to the Finished Goods store (Form 22). Storekeeper keeps stock cards (form 23) on which he records all goods received in store and also issues from store all from forms 22, 24, 26. Stock cards are controlled by a controlling account in the factory ledger called "Finished Goods stock Controls.

In sales department when an order is received from a customer, an order (form 25) is made by sales department and a copy is sent to the finished goods storekeeper, and one to the shipping department.

The storekeeper upon receiving order form 25 from sales department, prepares the goods and sends them with a store slip (Form 24) to the shipping department where the quantity is checked with form 24 and goods are packed and shipped.

The shipping department then sends form 24 properly checked and initialed to the sales department from which the invoice to the customer is made. (Form 27).

Goods returned from customers are received in shipping department and parcels are forwarded to storekeeper. The storekeeper then unpacks the goods, checks the quantity and makes a return goods memo form 26 and forwards one copy to the sales department from which credit note for customer is made. (form 28).

In making invoices in sales department, form 24 is compared with form 25. Invoices are numbered with same number as Finished Goods store slip, and numbers are controlled.

Credit Notes are numbered with same number as Goods returned memos, and numbers are controlled.

Special Consideration—Waste

In each productive department, there is a very small percentage, say 1% of material which does not come out finished product for that respective department through its falling on the floor while going through the machines, and this material is therefore not taken on production reports and no labor or overhead is charged to it so that it is called waste and is returnable to raw material store to be used later as raw material in the drawing department. The Waste is recorded on Waste Reports Form 15 and the total is at the end of the month debited to store and credited to Material account in the department from which the waste comes. The amount used is standard material price.

Factory Ledger Accounts

Drawing Department:—DR 1 Standard Material; DR 2 Material Price Variation; DR 3 Standard Labor; DR 4 Labor Cost Variation; DR 5 Standard Overhead; DR 6 Overhead Variation; DR 7 Indirect Labor; DR 8 Depreciation; DR 9 Light; DR 10 Power; DR 11 Rent; DR 12 Taxes; DR 13 Insurance; DR 14 Maintenance Furniture &

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Fixtures; DR 15 Maintenance Machinery & Equipment; DR 16 Supplies; DR 17 Receiving & Store Department Expense; DR 18 Repair Department Expense; DR 19 Cost Accounting Department Expense; DR 20 General Expense.

Roving Department:—RO 1 Standard Material; RO 2 Material Price Variation; RO 3 Standard Labor; RO 4 Labor Cost Variation; RO 5 Standard Overhead; RO 6 Overhead Variation; RO 7 Indirect Labor; RO 8 Depreciation; RO 9 Light; RO 10 Power; RO 11 Rent; RO 12 Taxes; RO 13 Insurance; RO 14 Maintenance Furniture & Fixtures; RO 15 Maintenance Machinery & Equipment; RO Supplies; RO 17 Receiving & Store Department Expense; RO 18 Repair Department Expense; RO Cost Accounting Department Expense; RO 20 General Expense.

Spinning Department:—SP 1 Standard Material; SP 2 Material Price Variation; SP 3 Standard Labor; SP 4 Labor Cost Variation; SP 5 Standard Overhead; SP 6 Overhead Variation; SP 7 Indirect Labor; SP 8 Depreciation; SP 9 Light; SP 10 Power; SP 11 Rent; SP 12 Taxes; SP 13 Insurance; SP 14 Maintenance Furniture & Fixtures; SP 15 Maintenance Machinery & Equipment; SP 16 Supplies; SP 17 Receiving & Store Department Expense; SP 18 Repair Department Expense; SP 19 Cost Accounting Department Expense; SP 20 General Expense.

Twisting & Reeling Department:—TR 1 Standard Material; TR 2 Material Price Variation; TR 3 Direct Labor; TR 4 Labor Cost Variation; TR 5 Standard Overhead; TR 6 Overhead Variation; TR 7 Indirect Labor; TR 8 Depreciation; TR 9 Light; TR 10 Power; TR 11 Rent; TR 12 Taxes; TR 13 Insurance; TR 14 Maintenance Furniture & Fixtures; TR 15 Maintenance Machinery & Equipment; TR 16 Supplies; TR 17 Receiving & Store Department Expense; TR 18 Repair Department Expense; TR 19 Cost Accounting Department Expense; TR 20 General Expense.

Dyeing Department:—DY 1 Standard Material; DY 2 Material Price Variation; DY 3 Standard Labor; DY 4 Labor Cost Variation; DY 5 Standard Overhead; DY 6 Overhead Variation; DY 7 Indirect Labor; DY 8 Depreciation; DY 9 Light; DY 10 Power; DY 11 Rent; DY 12 Taxes; DY 13 Insurance; DY 14 Maintenance Furniture & Fixtures; DY 15 Maintenance Machinery & Equipment; DY 16 Supplies; DY 17 Receiving & Store Department Expense; DY 18 Repair Department Expense; DY 19 Cost Accounting Department Expense; DY 20 General Expense.

Coning Department:—CO 1 Standard Material; CO 2 Material Price Variation; CO 3 Standard Labor; CO 4 Labor Cost Variation; CO 5 Standard Overhead; CO 6 Overhead Variation; CO 7 Indirect Labor; CO 8 Depreciation; CO 9 Light; CO 10 Power; CO 11 Rent; CO 12 Taxes; CO 13 Insurance; CO 14 Maintenance Furniture & Fixtures; CO 15 Maintenance Machinery & Equipment; CO 16 Supplies; CO 17 Receiving & Store Department Expense; CO 18 Repair Department Expense; CO 19 Cost Accounting Department Expense; CO 20 General Expense.

Receiving & Store Department:—RS 8 Depreciation; RS 9 Light; RS 11 Rent; RS 12 Taxes; RS 13 Insurance; RS 14 Maintenance Furniture & Fixtures; RS 21 Maintenance Machinery & Equipment; RS 22 Stationery & Office Supplies; RS 20 General Expense.

Repair Department:—RE 8 Depreciation; RE 9 Light; RE 11 Rent; RE 12 Taxes; RE 13 Insurance; RE 14 Maintenance Furniture & Fixtures; RE 20 General Expense; RE 21 Salaries; RE 22 Stationery & Office Supplies.

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Cost Accounting Department:—CA 8 Depreciation; CA 9 Light; CA 11 Rent; CA 12 Taxes; CA 13 Insurance; CA 14 Maintenance Furniture & Fixtures; CA 20 General Expense; CA 21 Salaries; CA 22 Stationery & Office Supplies.

51 General Ledger; 52 Raw Material & Supplies Store Control Account; 53 Finished Goods Store Control Account; 54 Inventory Adjustment; 55 Accrued Payroll.

Accounting Procedure—Factory Ledger Accounts

Account No. 1—Standard Material

Debited with:

Standard cost of material received from stores (from form 5)

Standard cost of material in process from other dept. (form 21).

Credited with:

Standard cost of material in process delivered to other dept. (form 21).

Standard cost of waste returned to store (form 15).

Standard cost of material returned to stores (form 9).

In case of coning dept. standard material in process instead of being credited as per form 21, is credited as per form 22.

Account No. 2—Material Price Variation

Debited or credited with any difference between actual cost of raw material delivered from stores and standard cost set (form 5).

Account No. 3—Standard Labor

Debited with:

Standard cost of labor according to form 12.

Standard cost of labor in process from other dept. (form 21).

Credited with:

Standard cost of labor in process delivered to other dept. (form 21).

In case of coning department, instead of being credited as per form 21, labor in process is credited as per form 22.

Account No. 4—Labor Cost Variation

Debited or credited with any difference between actual labor cost and standard labor cost as per form 12.

Account No. 5 — Standard Overhead

Debited with:

Standard overhead as per form 20.

Standard overhead in process from other dept. (form 21).

Credited with:

Standard cost of overhead in process delivered to other department (form 21).

In case of coning department, instead of being credited as per form 21 overhead in process is credited as per form 22.

Account No. 6—Overhead Variation

Debited or credited with any difference between actual overhead cost and standard overhead as per form 20.

Account No. 7—Indirect Labor

Debited with:

Actual indirect labor as per form 14.

Credited with:

Monthly distribution to standard overhead form 20.

Account No. 8—Depreciation

Debited with:

Monthly depreciation at fixed rate on value of machinery & equipment, furniture & fixtures by journal entry form 29 corresponding credit to general ledger).

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Credited with:

Monthly cost of depreciation form 20.

Account No. 9—Light

Debited with:

Monthly charge for light from purchase journal form 17.

Credited with:

Monthly cost of light as per form 20.

Account No. 10—Power

Debited with:

Monthly charge for power from purchase journal form 17.

Credited with:

Monthly cost of power as per form 20.

Account No. 12—Taxes

Debited with:

Monthly charges for taxes from journal entry form 29.

Credited with:

Monthly cost of taxes as per form 20.

Account No. 11—Rent

Debited with:

Monthly charge for rent as per purchase journal form 17.

Credited with:

Monthly cost of rent as per form 20.

Account No. 13—Insurance

Debited with:

Monthly charge for insurance as per journal entry form 29.

Credited with:

Monthly cost of insurance as per form 20.

Account No. 14—Maintenance Furniture & Fixtures

Debited with:

Charges for maintenance from purchase journal form 17.

Credited with:

Monthly cost of maintenance as per form 20.

Account No. 15—Maintenance Machinery & Equipment

Debited with:

Charges for maintenance as per purchase journal form 17.

Credited with:

Monthly cost of maintenance as per form 20.

Account No. 16—Supplies

Debited with:

Cost of supplies received from stores as per form 5.

Credited with:

Supplies returned to stores form 9.

Cost of supplies as per form 20.

Account No. 17—Receiving & Stores Department Expense

Debited with:

Monthly charge for non productive department form 19.

Credited with:

Monthly cost of receiving & store department form 20.

Account No. 18—Repair Department Expense

Debited with:

Monthly charge for repair department form 19.

Credited with:

Monthly cost of repair department as per form 20.

(To be Concluded)

A COST SYSTEM FOR A WOOLLEN MILL

Form 1

To Storekeeper
Deliver The Following To Department On No. 19.....
Date..... 19.....

STORES REQUISITION

Quantity Description

Requisitioned By
Approved By
1—Storekeeper, 2—Productive Department

Form 2

To The Purchasing Agent:—
Please Purchase The Following:—
Date Wanted Order No.....

PURCHASE REQUISITION

Quantity Description

Requisitioned By
Approved By
1—Purchasing, 2—Storekeeper

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Form 3

PURCHASE ORDER A COMPANY MONTREAL

Date..... No.....

To
Address

Please Send Us The Following Via..... On

Mention Order No. on Parcels and Invoices..... TermsTax

| Quantity | Description | Price | Amount |
|----------|-------------|-------|--------|
|----------|-------------|-------|--------|

Req. No.
Dept.

A Company
By

Acc. No.
1—Creditor. 2—Purchasing. 3—Storekeeper. 4—Receiver.

Form 4

RECEIVING REPORT

Date..... No.....

Received From Via

Charges

| Parcel Number | Quantity | Description |
|------------------|----------|-------------|
|------------------|----------|-------------|

Remarks:
1—Purchasing. 2—Cost Accounting. 3—Storekeeper. 4—Receiver.

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Form 5

STORES DELIVERY SLIP

Delivered To Dept. No.
 Charge Account Req. No. Date
 Amount

| Quantity | Description | Actual Price | Actual Amount | Stan. Price | Standard Amount | Material Variation |
|----------|-------------|-----------------|------------------|----------------|--------------------|-----------------------|
|----------|-------------|-----------------|------------------|----------------|--------------------|-----------------------|

Received By Delivered By
 1—Productive Dept. 2—Storekeeper. 3—Cost Accounting.

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Form 6

STORES STOCK RECORD

| Article | Quality | Maximum | Minimum |
|--|---------|----------|---------|
| Requisitioned | Ordered | Received | Issued |
| Date Req. No. Quan. Date Order No. Quan. Date Reg. Sl. Quan. Am't. Date Del. Sl. Quan. Am't. Average | | | Balance |

1—Storekeeper.

Price

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Form 7

| | |
|----------------------|-------------------------|
| Invoice No. | Entered |
| Rec. Report No. | Date Rec. |
| Terms | Entered Store Rec. |
| Price O.K. | Charges |
| Extension O.K. | Debit Note |

[illegible]

1—Purchasing.

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DEBIT NOTE A COMPANY

To
Date

We Have Debited Your Account For The Following:

| Quantity | Description | Price | Amount |
|----------|-------------|-------|--------|
|----------|-------------|-------|--------|

Your Invoice No. Date Returned Via
Reason:

1—General Accounting. 2—Cost Accounting. 3—Storekeeper.

1—General Accounting. 2—Cost Accounting.

A COST SYSTEM FOR A WOOLLEN MILL

Form 9

STORES RETURN SLIP

Received From No.
 Credit Account Req. No. Date
 Amount

| Quantity | Description | Actual Price | Actual Amount | Stan. Price | Standard Amount | Material Variation |
|----------|-------------|-----------------|------------------|----------------|--------------------|-----------------------|
|----------|-------------|-----------------|------------------|----------------|--------------------|-----------------------|

Received By:
 Delivered By:

1—Production Dept. 2—Storekeeper. 3—Cost Accounting.

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Form 10

TIME CARD

Name Dept.

Date In A.M. Out In P.M. Out In Night Out

1.—Cost Accounting.

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Form 11

DAILY PRODUCTION REPORT

| | | | | | |
|------------------|----------|------|-------|-------|-------|
| Name | No..... | | | | |
| Date | | | | | |
| Grade or Quality | Quantity | Rate | Wages | Bonus | Total |

Worker:

Checked By:

1—Cost Accounting. 2—Productive Dept.

Form 12

PAYROLL SHEET DIRECT LABOR

| | | | |
|------------|--------|----------|-------|
| Dept. | Actual | Standard | Labor |
|------------|--------|----------|-------|

Workers Made By:

Quantity Hours Wages Rate Wages Variation

1—Cost Accounting

A COST SYSTEM FOR A WOOLLEN MILL

Form 13

TIME CARD

Name Dept.

| Date | A.M. | | P.M. | | Night | |
|------|------|-----|------|-----|-------|-----|
| | In | Out | In | Out | In | Out |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Charge:

Dept. Hours
 Account Rate
 Made by Amount
 Verified by
 1—Cost Accounting.

Form 14

PAYROLL SHEET INDIRECT LABOR AND SALARIES

Dept. Date

| Name | Hours | Rate | Amount | Total | Account |
|------|-------|------|--------|-------|---------|
| | | | | | |
| | | | | | |
| | | | | | |

Made By:
 1—Cost Accounting.

Checked By:

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Form 15

WASTE REPORT

| Dept. | | Month | | | |
|------------|------------|-------------|---------|--------|-------------------|
| Date | Worker No. | Checked By | Quality | Weight | Price Amount |

Charge Store Account
 Credit Material in Process Dept. Amount
 1—Productive Dept. 2—Storekeeper. 3—Cost Accounting.

Form 16

PURCHASE JOURNAL — GENERAL ACCOUNTING

Sheet No.
 Month of

| Date | NAME | Inv. No. | Cr. Accounts Payable | Dr. Factory Ledger | Dr. Selling Expense | Dr. Adm. & Gen. Expense | Dr. Sundries Amount | Account |
|------|------|----------|----------------------|--------------------|---------------------|-------------------------|---------------------|---------|
| Acc. | | | | Acc. | | | | |

1—General Accounting.

Form 17

PURCHASE JOURNAL — COST ACCOUNTING

Sheet No.

Month of

| Date | NAME | Inv. No. | General Ledger | Raw Mat. & Supplies Store | Dept. | EXPENSES | | SUNDRIES | |
|------|------|----------|----------------|---------------------------|-------|----------|--------|------------|-------------|
| | | | | | | Account | Amount | Cr. Amount | Dr. Account |

1—Cost Accounting.

Form 18

MONTHLY DISTRIBUTION OF GENERAL FACTORY OVERHEAD

Month of

| Department | Depreciation | | Light | | Power | | Rent | | Taxes | | Insurance | |
|------------|--------------|--------|-------|--------|-------|--------|------|--------|-------|--------|-----------|--------|
| | Rate | Amount | Rate | Amount | Rate | Amount | Rate | Amount | Rate | Amount | Rate | Amount |

Distribution Made By

Checked By

1—Cost Accounting.

MONTHLY DISTRIBUTION OF NON PRODUCTIVE DEPARTMENTS COST

Month of

| Department | Rec. & Stores Dept. | | Repair Dept. | | Cost Acct. Office Exp. | |
|------------|---------------------|--------|--------------|--------|------------------------|--------|
| | Rate | Amount | Rate | Amount | Rate | Amount |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Total
Distribution Made By
Checked By
1—Cost Accounting.

FACTORY OVERHEAD PRODUCTIVE DEPARTMENTS

Month of

A COST SYSTEM FOR A WOOLLEN MILL

| | Drawing | Roving | Spinning | Twisting & Reeling | Dyeing | Coning |
|----------------------------|---------|--------|----------|--------------------|--------|--------|
| Indirect Labor | | | | | | |
| Depreciation | | | | | | |
| Light | | | | | | |
| Power | | | | | | |
| Rent | | | | | | |
| Taxes | | | | | | |
| Insurance | | | | | | |
| Maint. Fur. & Fix. | | | | | | |
| Maint. Mach. & Equip. | | | | | | |
| Supplies | | | | | | |
| Rec. & Store Dept. Exp. | | | | | | |
| Repair Dept. Exp. | | | | | | |
| Cost Acc. Office Exp. | | | | | | |
| General Expense | | | | | | |
| Actual Overhead | | | | | | |
| Direct Labor Hours | | | | | | |
| Standard Rate | | | | | | |
| Standard Overhead | | | | | | |
| Overhead Variation | | | | | | |
| Distribution Made By | | | | | | |
| Checked By | | | | | | |

1—Cost Accounting.

COST AND MANAGEMENT

Form 21

MONTHLY REPORT OF TRANSFER OF GOODS IN PROCESS

| Production Report No. | Weight | Rate | Material | | Rate | Labor | | Rate | Overhead | |
|--------------------------|--------|------|----------|------|------|--------|------|------|----------|------|
| | | | Amount | Rate | | Amount | Rate | | Amount | Rate |

| | | | |
|-------------|-------|-------------------------|-------|
| Debit | Dept. | Credit | Dept. |
| | | Standard Material | |
| | | Standard Labor | |
| | | Standard Overhead | |

1—Cost Accounting.

Form 22

MONTHLY REPORT OF GOODS DELIVERED BY CONING DEPT. TO FINISHED GOODS STORE

| Production Report No. | Weight | Quality | Material | | Rate | Labor | | Overhead | Rate | Total Price | Price Per lb. |
|--------------------------|--------|---------|----------|------|------|--------|------|----------|------|----------------|------------------|
| | | | Amount | Rate | | Amount | Rate | | | | |

| | |
|----------------------------------|-------------------------|
| Debit Finished Goods Store | Credit Coning Dept. |
| Items: | Standard Material |
| | Standard Labor |
| | Standard Overhead |

1—Cost Accounting. 2—Storekeeper.

A COST SYSTEM FOR A WOOLLEN MILL

Form 23

FINISHED GOODS STOCK CARDS

Article Quality Color

| RECEIVED | | | | ISSUED | | | | BALANCE | | | |
|--------------|--------|------|-------|--------|--------|------------|-------|---------|--------|-------|-------|
| Prod. Return | Report | Memo | Quan. | Price | Amount | Store Slip | Quan. | Price | Amount | Quan. | Price |
| | | | | | | | | | | | |

1—Storekeeper.

Form 24

FINISHED GOODS STORE SLIP

Sales Order No. No. Date

| ARTICLE | QUALITY | COLOR | WEIGHT | SELLING Price | AMOUNT | COST Price | AMOUNT |
|---------|---------|-------|--------|---------------|--------|------------|--------|
|---------|---------|-------|--------|---------------|--------|------------|--------|

Debit: General Ledger (Cost of Sales) Filled By
 Credit: Finished Goods Store Packed By
 1—Shipping Dept. 2—Storekeeper. 3—Cost Accounting. Checked By

COST AND MANAGEMENT

Form 25

SALES ORDER

Name No.
 Address
 Ship Via Date
 Shipping Date
 Salesman

| ARTICLE | QUALITY | COLOR | WEIGHT | PRICE | AMOUNT |
|---------|---------|-------|--------|-------|--------|
|---------|---------|-------|--------|-------|--------|

1—Storekeeper. 2—Shipping Dept. 3—Sales Dept.

Form 26

GOODS RETURNED MEMO

Name No.
 Address
 Invoice No. Returned Via Date
 Charges

| ARTICLE | QUALITY | COLOR | WEIGHT | SELLING Price Amount | COST Price Amount |
|---------|---------|-------|--------|-------------------------|----------------------|
|---------|---------|-------|--------|-------------------------|----------------------|

Debit: Finished Goods Store
 Credit: General Ledger (Cost of Sales)

Received By
 Unpacked By
 Checked By

1—Shipping Dept. 2—Storekeeper. 3—Cost Accounting.

A COST SYSTEM FOR A WOOLLEN MILL

Form 27

INVOICE

No.
Date

Name.....
Address.....
.....
Terms..... Shipped Via.....

| Article | Quality | Color | Weight | Price | Amount |
|---------|---------|-------|--------|-------|--------|
|---------|---------|-------|--------|-------|--------|

| | | | | | |
|--|--|--|--|--|--|
| | | | | | |
| | | | | | |
| | | | | | |

1.—Customer. 2.—General Accounting...3.—Sales Dept.

249

Form 28

CREDIT NOTE

No.
Date

Name.....
Address.....
.....

| Article | Quality | Color | Weight | Price | Amount |
|---------|---------|-------|--------|-------|--------|
|---------|---------|-------|--------|-------|--------|

| | | | | | |
|--|--|--|--|--|--|
| | | | | | |
| | | | | | |
| | | | | | |

1.—Customer. 2.—General Accounting...3.—Sales Dept.

FACTORY LEDGER JOURNAL ENTRY

| FACTORY LEDGER JOURNAL ENTRY | | Month of |
|------------------------------|-----|----------------|
| Date | No. | |
| | | Debit |
| | | Credit |

1.—Cost Accounting.

COST AND MANAGEMENT

GENERAL LEDGER JOURNAL ENTRY

[illegible]

1.—General Accounting.

DISTRIBUTION PROBLEMS

Distribution Problems

(From the Bulletin of the International Management Institute)

THE Seventh Congress of the International Chamber of Commerce, which took place at Vienna from May 29th to June 3rd, witnessed the first results of the initiative suggested at the Washington Congress of 1931 for the establishment of international machinery for the study of distribution. That initiative followed on the report presented to the Congress by The International Management Institute in collaboration with Mr. F. P. Valentine and an American Committee on "Distribution Problems in Europe and the United States". In June 1932 proposals which had been discussed by the two organizations for setting up joint arrangements for the study of distributive questions took shape in the foundation of The International Distribution Commission, which appointed a Finance and Propaganda Committee and a Technical Committee. At the Vienna Congress the work of these two Committees formed the basis of discussion at the first plenary session and at two group sessions.

As a result of these discussions the following important Resolutions were passed by the Congress:

I

The International Chamber of Commerce, considering:

a) That the distribution of goods and services is one of the most important aspects of modern economic life;

b) That more intensive study of the processes of consumption and distribution is an essential preliminary to stable production;

c) That fuller knowledge can help to reduce materially the costs of distribution by providing standards for the guidance of retailers, wholesalers and manufacturers and by enabling national markets to be evaluated by commodity lines;

d) That the extension of consumer markets consequent upon a reduction of distributive costs will help towards recovery from the world crisis;

Welcomes the formation of the International Distribution Commission and, while recognising that the magnitude of its task must make its work long and difficult, urges the Commission to prosecute its activities with the utmost energy;

Recommends:

1. That National Coordinating Committees should be formed in all countries and when formed should press on with their work as vigorously as possible;

2. That the interest and support of business should be enlisted by encouraging the exchange of experience and indicating the immediate and practical value of distributive studies;

3. That international comparability of statistical and other data should be attained wherever possible;

4. That universities and other educational institutions should take steps to assist in providing the trained and informed personnel on whom scientific methods of distribution and enlarged markets largely depend;

and urges that the Council and International Headquarters should take every possible action in whole-hearted support of the International Distribution Commission and its work.

COST AND MANAGEMENT

II

The International Chamber of Commerce considers:

1. That it is essential to adapt the processes of distribution more closely to the needs of consumers and producers;

2. That it is possible to lessen the disequilibrium between production and consumption by improving the methods of distribution now employed by all types of distributors;

3. That a general application of the most scientific methods of distribution should be encouraged and not impeded;

4. That freedom of trade international and national must be safeguarded;

5. That, since hindrances to international exchanges constitute one of the principal and most serious obstacles to the restoration of economic equilibrium and since hindrances affecting the free functioning of distribution in the national sphere would also prove most injurious, exceptions or restrictions to the freedom of trade international or national are admissible only if they are necessary for maintaining public order or sound commercial practice;

and recommends that,

in view of the foregoing considerations, no discriminatory measures should be imposed which would restrict the free development of distributive agencies.

The International Management Institute collaborated with the International Chamber of Commerce in a number of ways. In the first place a Report on the American Census of Distribution in English, French and German had been prepared by the Institute on behalf of the International Distribution Commission and was placed on sale at the Congress. The Chairman of the International Distribution Commission referred to this Report at the Plenary Session in the following terms: "I hope this Congress will send a message to all the National Committees asking, as a matter of urgency, for such suggestions and for all the information bearing on the subject of Distribution as can be put at once into the common pool. As an example of what I have in mind I would mention first of all the United States Census of Distribution on which the International Management Institute has just issued a most valuable report. This I hope will be widely purchased by Members of the National Coordinating Committees and by Members of Chambers of Commerce throughout the world". The Director of the Institute addressed one of the Group Sessions on "The American Census of Distribution and its Significance for other Countries". In addition, the Institute supplemented this Report by an exhibition of diagrams illustrating in detail the contents of the various reports issued as a result of the American Census of Distribution. The Institute was represented at the Congress by Dr. Mauro, its President, the Director, Mr. Hugo von Haan, and Colonel W. O. Kaikes.

During the course of the Congress a Meeting of the International Distribution Commission was held and plans for future work and progress were developed. Thus the initiative taken by the International Management Institute two years ago in suggesting to the International Chamber of Commerce a plan for joint action for the more intensive study of the technical aspects of Distribution and for the popularisation and development of the results of such studies has already led to substantial practice results. Under the leadership of its President, Sir Francis Goodenough and of its Vice-President, Mr. Emile Bernheim, the International Distribution Commission has already made headway, despite the increasing incidence of business depression. As

DISTRIBUTION PROBLEMS

the Report presented to the Congress by the Rapporteur General, Mr. Menken, on "The Work and Aims of the Commission" observes, "Machinery for the international study of Distribution has now been presented for the first time; a programme of practical study has been drafted and is in course of execution; the necessary supporting bodies in some of the principal countries concerned have been established or are in process of establishment".

THE FAIRY COW

TEN men who were financiers chipped in \$10 each and bought a fine cow that gave 10 gallons of milk every day.

The milk was divided at night and each man received one gallon as his share.

Soon the neighbours far and near heard about the wonderful cow and said to one another, "Think of getting a whole gallon of milk every day. What a wonderful return on a \$10 investment. I wish I had a share in her."

When this talk was repeated to the 10 men, they held a meeting and one of them said—"Let us give these people what they want. Our shares in the cow cost us \$10 each, and we can sell other shares at the same price."

So they went to the printer and obtained 1,000 sheets of paper bearing the legend—"one share in the cow." Then they sold 500 of these shares at \$10 each, which brought them \$5,000 and divided the other 500 among themselves as their reward for being smart.

Each man of the 10 now had 51 shares, whereas in the beginning each had but one.

But one of the 10 began to worry.

"Look here," he said, "every fellow who bought a share in this cow will expect a gallon of milk tonight, and the cow gives only 10 gallons. When the milk is divided into 1010 parts these new shareholders won't get a spoonful. Shares will drop to nothing. We'd better unload while we can."

So the 10 men went out on the street to find investors and each of them sold the 50 shares that had been awarded to him, and thus they obtained a second \$5,000 to divide among them.

But now night was drawing near and again one of the 10 began to worry.

"There will be a row at milking time," said he. "Hasten abroad and persuade each of the shareholders to sign a proxy, which is a joker authorizing you to cast as you think best the vote to which his share entitles him. Then return with the proxies and we shall do some voting."

At twilight the men met at the barn, and in their hands were 1,000 signed proxies to represent the absent shareholders. And the 10 were entitled to vote in their own right, for each still held his original share.

"Now," said the one who did the talking, "we must organize. This company needs a president, a treasurer and eight vice-presidents. That gives us each a job. And since there are 10 of us and the cow gives 10 gallons, it is moved and seconded that each of us receive a salary of one gallon of milk per day. All in favor say 'Aye'."

The motion passed without a dissenting vote.

And then they milked the cow.

CHAPTER NOTES

TORONTO

Toronto Chapter executive has arranged a program of eight meetings for the season. The first of these will be on October 10th, and will be addressed by our own president, G. H. Houston, on "The Price Question and the Possibilities of the NRA." This is one of the liveliest questions just now, and of direct concern to business men and accountants in Canada as well as in the United States.

Meetings this season, will again be dinner meetings at the Royal York Hotel, at 6 p.m. As before, members are welcome to come in about 7 o'clock in time for the address and discussion, without dinner charge. The Toronto executive, however, felt that part of the Chapter's funds could be used in no better way than in meeting part of the cost of the dinners, and the charge to members will be 75 cents. In this way the cost to a member, of taking an active part in the Society for the year, will be reduced, and it is hoped that attendance will be stimulated. While the Society's membership fee of \$15 was not changed, this year it covers the 14-month period ending April next, which is also a substantial concession, since it covers membership to the end of a season's regular meetings.

The Toronto program for the season includes some topics of general interest to our members, including the railway problem, also several meetings on Public Utility Costs, Budgetary Control, Textile Costs, and other topics more directly within our own field.

Membership is again arranged by teams this season, and the members of the team scoring the highest points for attendance, etc., will be the guests of the Chapter at its closing dinner.

VANCOUVER

Reported by Maurice Willis, Secretary

The Vancouver Chapter held their first meeting on Tuesday evening September 26th in the Committee Room of the Associated Dairies Ltd. under the Chairmanship of Mr. G. R. Baird.

Mr. Mackin, General Manager of the Associated Dairies Ltd. welcomed the members in a fitting speech and stated that he wished to give the Society all the help he could as he knew that properly kept costs were a decided help in any business.

After all business on hand had been transacted, Mr. G. R. Baird, who was speaker for the evening, started his talk on 'Cost Accounting in the Dairy Industry.'

Mr. Baird's talk was clear and concise, he showed us how the Associated Dairies Ltd. could get out a report by noon showing the sales and returns made by over one hundred salesmen the quantity and the value of all the various grades and brands of milk, and there are seventy five of these, of the previous day's business. Also by the eighth of the month a detailed report was on the General Manager's desk showing sales by brands and salesmen, expenses of the various branches and expenses relating to the wagons and trucks, even bringing it down to the gallonage per mile of each truck. This fast work we were told was through a new installation of the Hol-lerith Punch Card System.

CHAPTER NOTES

It is impossible to give a detailed account of this lecture in this column, but we hope to see it in print soon in the Cost and Management.

At the close of the meeting we were invited by Mr. Mackin to partake of a little nourishment which helped to bring the members and guests together socially.

The first meeting was a huge success and the encouragement received foretells a successful year.

THE TREND OF PRODUCTION COSTS

Commodity prices as measured by the Dominion Bureau of Statistics index number which is based on the year 1926, declined from 70.5 in July to 69.4 in August. The following is a comparison by main groups:

| | August 1932 | July 1933 | August 1933 |
|--|----------------|--------------|----------------|
| Foods, beverages and tobacco | 61.3 | 67.8 | 66.4 |
| Other consumers' goods | 77.6 | 75.3 | 76.2 |
| All consumers' goods | 71.1 | 72.3 | 72.3 |
| Producers' equipment | 88.1 | 86.6 | 85.2 |
| Building and construction materials .. | 75.3 | 80.7 | 80.7 |
| Manufacturers' materials | 57.0 | 65.1 | 62.0 |
| All producers' materials | 60.3 | 67.9 | 65.4 |
| All producers' goods | 63.1 | 69.8 | 67.4 |
| All commodities | 66.7 | 70.5 | 69.4 |

REFERENCE LITERATURE

RECEIVED IN SEPTEMBER

- Overhead Costs in Theory and Practice. The Accountant, August 19, 26. Sept. 2, 9, 16.
- Colliery Accounts. The Accountants' Journal, September.
- Airline Operation, Organization and Budgeting for. The Certified Public Accountant, September.
- Lumber Accounting. Journal of Accountancy, September.
- Woollen Trade, Cost Accounting in the. The Cost Accountant, August.
- Road Plant, The Control and Costing of Municipal Haulage and. The Cost Accountant, August.
- Flour Mill, The Audit of. The Chartered Accountant in Australia, August 21.
- Pastoral Accounts. The Chartered Accountant in Australia, July 20.
- Standard Costs, Some Controversial Phases of. National Association of Cost Accountants, September 15.
- Budgetary Control of Capital Expenditures. The American Accountant, September.
- Distribution Expenses, Allocation of by Classes of Product by Use of Standard Rates. National Association of Cost Accountants, September 1.
- Distribution Cost Analysis and Its Influence on Pricing Policy. National Association of Cost Accountants, September 1.

COST AND MANAGEMENT

NEW MEMBERS

The following are new members of the Society:

Montreal

Miller, R. C., International Business Machines Co. Ltd., Montreal.
Renaud, P. A., C.G.A., Loretteville, Que.

Toronto

Heighton, J. P., Canada Malting Co. Ltd., Toronto.

Hamilton

Ward, W. R., Dominion Natural Gas Co. Ltd., Hamilton.

PERSONAL ITEMS

Chas. E. Whitten, formerly an active member and officer of Montreal Chapter, and for the past two years with Dominion Woollens and Worsteds, Ltd., in Toronto, is now secretary-treasurer of Firstbrook Boxes, Ltd., Toronto.

G. A. Warmingham, formerly of Peterborough, Ont., is now located in Toronto. Mr. Warmingham made a trip to England during the past summer.

COULDN'T FOOL HIM

"Generally run down, sir?" queried the druggist; "slightly seedy and want a good toning up?"

The pale-faced customer nodded.

"Well, I've the very thing for you, Jenkin's Juvenator. Three doses a day and more if necessary. Fifty a bottle."

"No, thanks," said the pale patient.

"But, my dear sir, it's the rage of the day. Jenkin's Juvenator is the greatest discovery of modern science. It's the rage of the season. Every one is rejuvenating, you might say."

"Yes, but I think I'd rather try something else," replied the customer.

"Nonsense," pressed the druggist, "I tell you Jenkin's Juvenator will have more effect on you in a single day than any other medicine could have in a month. It cures everything from coughs to corns. What is your objection to it?"

"Why, nothing, only I'm Jenkins."

* * * *

Husband (who has just secured a job)—Cheer up. The tide has turned. I've found a job as a night watchman.

Wife—Well, if that ain't aggravating. I've only just finished makin' ye a couple of new night shirts.

* * * *

Statesman: "And these figures are not mine, gentlemen; they are the figures of one who knows what he is talking about."

* * * *

Teacher asked a seven-year-old girl what a bridegroom was.

"Please, teacher," was the reply, "it's a thing they have at weddings."

* * * *

A negro was pleading his own case to save expense. He called the chief witness to the box and demanded:

"Joshua, where was I when we stole them chickens?"

